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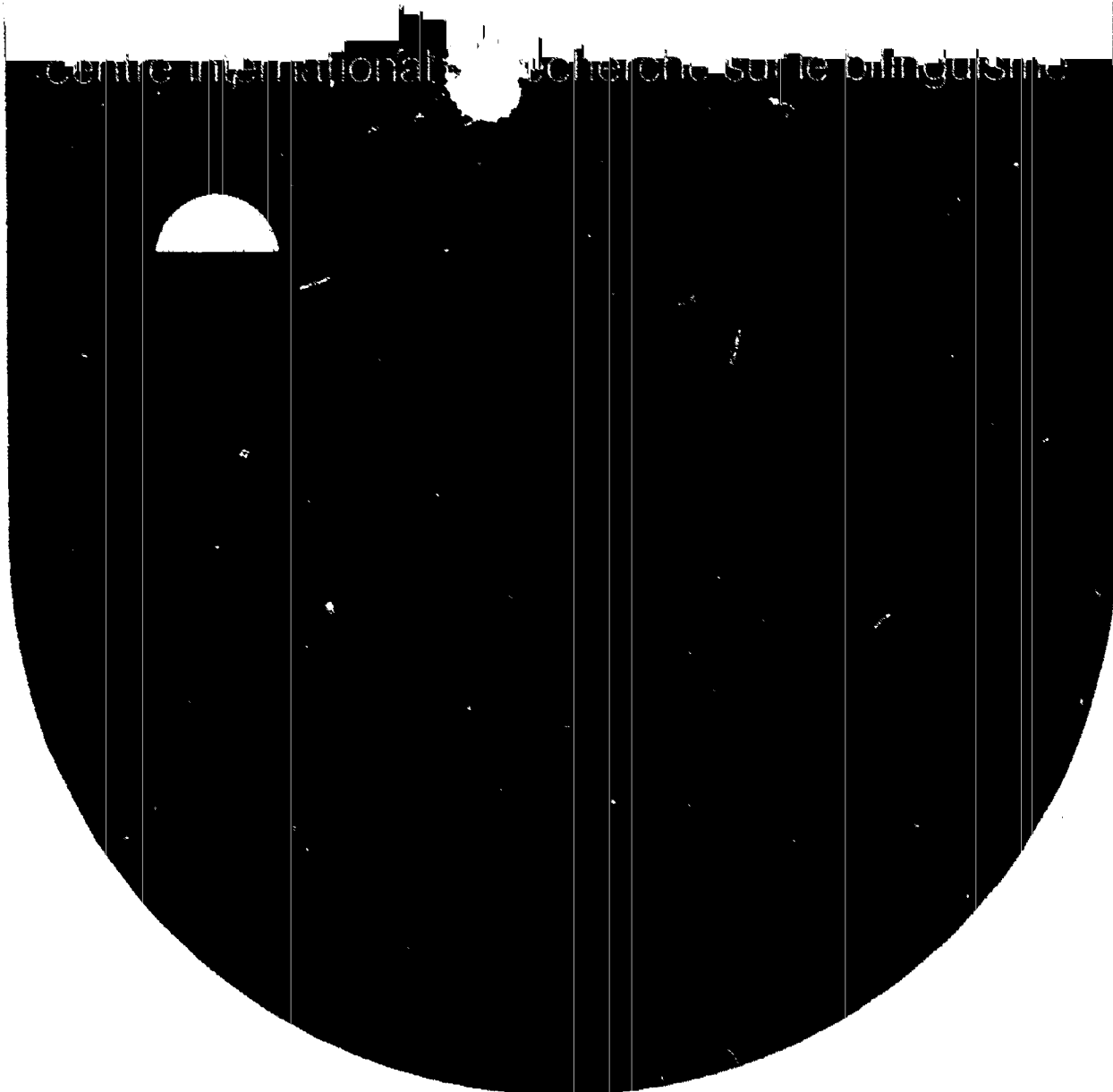
ABSTRACT

Four hypotheses are addressed concerning the relationship of the types and proportion of strategies adopted by the subject groups to the proficiency levels, and the subjects' rate of success and effective use of communication strategies for conveying intended meaning as they relate to proficiency level in the target language. The subjects were 40 Persian students in Canada at two distinct proficiency levels, and 20 native English speakers as a comparison group. Communication skills were elicited by a concept-identification task using concrete and abstract nouns, and involving both oral production and interaction between members of the two groups. A taxonomy of communication strategies was developed, with classification into four communicative approaches (linguistic, contextual, conceptual, and mime) based on the type of knowledge used by the speaker for their adoption. Results also showed that differences between groups in the adoption of communication approach types were minimal except in the relative frequency of use of some strategies, and that the groups differed in success rate at getting meaning across and in their effective use of strategies to communicate abstract concepts. It is concluded that use of communications strategies and target language proficiency level are related, use of communication strategies is dynamic, and that differing surface realizations of speakers' communication skills cumulatively affect success in conveying meaning. (MSE)

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THE RELATIONSHIP BETWEEN THE USE OF COMMUNICATION STRATEGIES AND ASPECTS OF TARGET LANGUAGE PROFICIENCIES - A STUDY OF ESL STUDENTS

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**The relationship between the use
of communication strategies and aspects
of target language proficiencies —
A study of ESL students**

Tahereh Paribakht

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**Centre international de recherche sur le bilinguisme
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ABSTRACT

This study is an attempt to clarify the relationship between speakers' use of communication strategies (CS) and aspects of their target language development.

Four major hypotheses are proposed and examined in the study. The first two hypotheses relate the types and proportion of strategies adopted by the subject groups to their proficiency level. The third and the fourth hypotheses examine the subjects' rate of success and their effective use of CS at conveying their intended meanings as they relate to the subjects' proficiency level in the target language.

The subjects were 40 Persian ESL students in Canada, at two distinct levels of target language proficiency, and 20 native speakers of English as the comparison group. The CS use of these subjects was elicited by a concept-identification task comprising concrete and abstract nouns. The task involved oral production and interaction between the subjects and their native-speaker interlocutors.

A taxonomy of CS, elicited by the data of this study, was developed. The strategies were classified into four major communicative approaches (Linguistic, Contextual, Conceptual & Mime) on the basis of the type of knowledge utilized by the speaker for their adoption.

The analysis of the data related to the first and the second hypotheses indicated that the differences among groups in the adoption of types of CS were minimal. Groups differed, however, significantly in the relative frequency of use of a number of CS.

The results related to the third and the fourth hypotheses revealed that groups were different in their rate of success in getting their meanings across, and in their effective use of CS only in relation to the communication of abstract concepts.

It is concluded that, in general, speakers' use of CS and their level of target language proficiency are related. It is also shown that learners' CS use is dynamic and its directionality of transition is towards that of the native speakers. It is suggested that all adult speakers share a certain ability referred to as "strategic competence". It is further shown that the surface realizations of the speakers' CS differ, in terms of grammatical accuracy and informative value. These differences cumulatively affect speakers' success and effective use of CS in the conveyance of their meanings.

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CHAPTER 1

INTRODUCTION

The second language (L2) learners' use of the target language (TL) has frequently been examined with respect to different aspects of language such as grammatical accuracy and sociolinguistic appropriateness. Each of these aspects has, however, limited descriptive or explanatory power in relation to the learners' interlanguage (IL) performance. A number of researchers have, therefore, accounted for certain IL forms in terms of the learners' use of learning and communicative strategies (e.g., Selinker, 1972; Richards, 1971a, b). It has been shown that IL speakers use communication strategies (CS) in their TL production (e.g., Varadi, 1973; Tarone, 1977; Bialystok & Fröhlich, 1980). CS, therefore, as a system underlying learner's TL use, can account for certain features of the learners' IL performance.

To date, most research on CS has focussed on the identification and classification of the learners' CS, without providing a link between the use of these strategies and the state of the learner's IL development. Examination of learners' CS use, within the framework of language proficiency, may provide additional insight into the nature of learners' IL performance. Furthermore such study may shed some light on the construct of language proficiency itself.

Recent studies have shown that language proficiency is a complex construct (e.g., Canale & Swain, 1980; Bialystok, 1981). It is not yet clear, however, what exactly the constituents of language proficiency are, what precisely the relationship among different aspects of knowledge is, and how these knowledge bases contribute to the speaker's communicative performance. Different aspects of language proficiency may be identifiable through detailed analysis of the speaker's language performance from all possible angles. Only then may one gain some insight as to what kinds of knowledge, skills or abilities indicate or contribute to, an increase in the language proficiency of the speaker. Canale & Swain (1980) suggest that "strategic competence" is one of the component competencies of the speaker's communicative competence (see footnote 1). It is not, however, shown what the interrelationships among different competencies are, and how an increase in the speaker's formal knowledge of the TL would affect his/her strategy use.

The present study examines patterns of CS use at different stages of the speakers' TL development. The study will attempt to clarify how a shift in the speakers' TL knowledge affects their use of CS.

The second chapter gives a brief background to the development of the notion of IL, and specifies the conception of IL to be adopted in this study. It is proposed that an adequate explanation of the learner's IL must incorporate the construct of CS. The third chapter provides a critical review of the literature on CS in terms of both theoretical and empirical considerations. These two chapters provide the study's background. Chapter 4 sets out the main problems, the specific hypotheses and the methodology, including design, sample and procedures. The results of the qualitative analysis of the data are described in Chapter 5; the developed taxonomy of CS is described. The summary of the results from the quantitative analysis of the data related to the major hypotheses of the study are reported and discussed in Chapter 6. Chapter 7 draws conclusions and implications for theory and L2 pedagogy and offers suggestions for further research.

CHAPTER 2

THE STUDY OF INTERLANGUAGE — HISTORICAL OVERVIEW

The behavioral psychologists' view of language learning as a process of habit formation, and the structuralists' view of languages as unique formal systems, provided a dominant framework for L2 learning research in the 1950s and mid-1960s. Within this framework, learners' errors were regarded as indicators of their difficulties with certain aspects of the TL which could be explained by the persistence of the habits of the mother tongue (e.g., Lado, 1957). These predictions were the substance of the Contrastive Analysis Hypothesis, according to which L2 learners' errors could be predicted from a comparison of differences between the first language (L1) and the TL. The Contrastive Analysis Hypothesis was later questioned due to its inadequacies in predicting and/or explaining all the learners' errors (e.g., Dušková, 1969; Nickel, 1971; Richards, 1971a), and due to its debatable theoretical basis in the face of the notion of the language learning process as a creative one (Bailey, 1973; Dickerson, 1975). Doubt about the value of the behaviorists' and structuralists' view of language learning rose from the serious criticisms put forward by post structuralists (e.g., Chomsky, 1966) and cognitive theorists (e.g., Carroll, 1966) who regarded language learning as an active creative process rather than a merely mechanical one. The implication of the new trend for L2 learning research and L2 teaching was, therefore, to view language learning as a learner-centred process.

The study of learners' errors, as a significant source of data which could help to reveal the language learning process, was then pursued (Corder, 1967). Later studies of errors by Dulay and Burt (1974) led to the development of the Creative Construction Hypothesis. This hypothesis stated that language learners construct for themselves a grammar of the TL on the basis of the linguistic data to which they are exposed both in and out the language classroom. This construction of rules is said to be creative, because they are different from those used by native speakers (NS) and hence are "created" by the learner. Within this framework, errors are viewed as not only inevitable but also necessary in the language learning process.

Error analysis and the observation of systematic errors by learners led to the study of the "transitional competence" of the learner (Corder, 1967), also referred to as "approximative systems" (Nemser, 1971), "idiosyncratic dialects" (Corder, 1971), or "interlanguage" (Selinker, 1972).

IL is defined as a unique, dynamic linguistic system (rather than a defective form of the TL) resulting from the regular application of hypotheses, rules and strategies (Selinker, 1972). As such, it focusses attention on the learner and the cognitive processes at work.

In that the notion of IL grew out of the analysis of learners' errors, a large proportion of research concerned with the construct of the phenomenon of IL was carried out with a focus on the learners' errors as an overt characteristic of their IL (e.g., Schachter, 1974). Most of these analyses on the surface form of the learners' IL included morphological and syntactic, and sometimes phonological, aspects of the learners' IL. However, since language in a more global sense includes other aspects — such as lexical items, prosodic features, sociolinguistic appropriateness, discoursal features and speech acts — a more comprehensive description of IL would need to take all these aspects into consideration.

The initial preoccupation of the researchers with surface errors of the learner's language, which has been referred to as "remedial error analysis" by Corder (1978a), reflects two major trends. First, language proficiency was viewed mainly in relation to the grammatical accuracy of the learners' IL. More recent studies on the construct of language proficiency reveal, however, that it comprises a number of skills and abilities and that measurement of one aspect of proficiency may not be a predictor of performance in another (cf. Bialystok, 1981). Second, the analysis of the IL form offered immediate pedagogical implications for assessing the developmental stage of the learner's IL, i.e., determining how much the learner had learned and how much still remained to be learned (Corder, 1967), facilitating correction and evaluation (Corder, 1967) and providing potential feedback for the design of L2 syllabuses, pedagogical grammars and remedial programs (Corder, 1978a). Regarding evaluation, different views related to the types of errors to be corrected were then offered on the basis of a variety of criteria. For example, Richards (1973) suggested that the level of NS' acceptability can determine the types of errors to be dealt with in the classroom. Burt and Kiparsky (1975, cited in Corder, 1978a, p. 66) believed that global rather than local errors should be corrected. Similarly, Corder (1978a) proposed that only those errors which interfere with comprehension must be corrected.

A number of researchers, apart from identifying learners' errors, have tried to explain them as signs of learners' hypothesis testing and as indicators of their strategies in learning or communicating in the TL (e.g., Richards, 1971a, 1971b, 1973; Selinker, 1972). Corder (1978a) refers to this approach to the study of the learner's IL as "developmental error analysis", aimed at identifying the L2 learning process(es).

The Conception of Interlanguage as Viewed in this Study

The phenomenon of IL is taken in this study to refer only to a learner's control of the TL system at a given point in time, with respect to different aspects of language such as syntax and phonology (see footnote 2).

The effect of learners' communicative strategy use on the realization of their IL is indicated by the existence of certain non-target forms in their IL production. For example, the use of strategies such as "creating L2 cognates", "foreignizing L1" and "transliteration" (see Chapter 3 for definitions of these CS) may produce in the learners' language certain non-target patterns that may not be identified or explained solely by considering the learners' grammatical errors. Examination of learners' strategy use may, however, provide a means of explanation for the existence of these deviant IL forms. That is, IL can be more adequately explained by taking the construct of CS into consideration. Such an investigation may also aid in understanding the way learners put their IL into use. Furthermore, learners' use of CS may lead to additional learning or fossilization. The examination of learners' strategy use at different stages of their IL development may, therefore, shed some light on language learning process(es). These issues remain to be clarified by further empirical research. The present study will concentrate on the patterns of CS use by speakers at different stages of their TL development.

CHAPTER 3

THE STUDY OF COMMUNICATION STRATEGIES -- LITERATURE REVIEW

Theoretical Considerations

Strategy and Process

There is a great deal of confusion and ambiguity in the L2 learning literature concerning the use of the terms 'strategy' and 'process' (see footnote 3). Different definitions based on a variety of criteria have been suggested for the two phenomena. Stern (1974, cited in Naiman et al., 1975, p. 59) makes a distinction between 'strategy' and 'technique'. He defines 'strategy' as "the *general* overall characteristics of the approach employed by the learner", and 'technique' as "a *particular* form of observable language learner behaviour more or less consciously employed by the learner" (emphasis mine). Rubin (1975, p. 43), however, blurs this distinction by referring to 'strategies' as "the techniques or devices which a learner may use to acquire knowledge". Bialystok (1978, p. 76) defines the concept as "optional methods for exploiting available information to increase the proficiency of second language learning". All these definitions seem to refer only to learning strategies.

Blum and Levenston (1978, p. 402) propose a distinction between 'strategy' and 'process' on the basis of a temporal criterion. They suggest that 'strategy' is "the way the learner arrives at a certain usage at a specific point in time"; whereas, 'process' is the "systematic series of steps by which the learner arrives at the same usage over a period of time". That is, 'strategy' involves "single cases" but 'process' "presupposes that a number of operations have taken place". The authors claim that if, for example, a learner's error could be traced to his or her L1, then one could infer that he or she has used a strategy of 'transfer'. However, in talking about transfer as a 'process' one has to know in what ways and to what extent the learner's L1 has influenced his or her IL.

Selinker (1972, p. 112) suggests that a learner has a "latent psychological structure" comprising five "processes" (language transfer, transfer of training, strategies of L2 learning, strategies of L2 communication and overgeneralization of TL linguistic material) which are central to L2 learning. This definition, apart from indicating the ambiguity in the use of the terms 'strategy' and 'process', is confusing in that 'transfer' and 'overgeneralization' have also been referred to as strategies of both L2 learning and L2 communication in the literature (e.g. Richards, 1973; Taylor, 1975).

Faerch and Kasper (1980, p. 104) place the description of strategies and processes in a "general model of goal-related intellectual behaviour" which involves cognitive processes. The model comprises two phases: the planning phase which includes "goal", "planning process" and "plan"; and the realization phase which consists of "plan", "realization process" and "action". The planning process is sensitive to the communicative goal, the sources available to the speaker and the assessment of the communicative situation. The outcome of this process is a plan which controls the realization process. The authors further suggest that each of these phases of planning and realization could present itself as a problem to IL speakers. In the planning phase, the learner's problems may basically be related to insufficient linguistic means or to a prediction of not being able to realize a plan.

The realization phase may involve problems such as retrieving the phonological or orthographical forms of the items which have been selected for the plan. Faerch and Kasper further suggest that CS are used to solve problems occurring in either phase. These authors use "problem" as the major defining criterion and "consciousness" as a secondary criterion for 'strategies' (see footnote 4). Consequently, they propose that 'strategy' is "a potentially conscious plan for solving what to the individual presents itself as a problem in reaching a particular goal" (p. 60). The criterion of problem-orientedness for the definition of strategies has also been suggested by Kellerman (1977, p. 93). He suggests that 'strategy' is a "well-organized approach to a problem" (see also Jordens, 1977, p. 14). This defining criterion seems to be the most appropriate one for the notion of CS in that CS has been defined as the ways L2 learners adopt to communicate their intended meaning with their inadequate command of the TL (Tarone, Cohen & Dumas, 1976; Tarone, 1977).

Regarding the role of CS in the L2 learning process, Faerch and Kasper (1980) suggest that only those strategies which are related to the solving of problems in the planning phase and only with respect to hypothesis formation may contribute to L2 learning. Strategies which are connected with the realization phase will only be associated with automatization. Faerch and Kasper further assume that the basic criterion for CS to have potential learning effect is that they have to be governed by 'achievement' rather than 'avoidance'. The extent to which the use of CS leads to additional learning and fossilization would need to be examined in L2 learning research.

Communication Strategies

The history of the study of CS dates back to Selinker's (1972) work on "interlanguage", in which he accounted for some of the learners' errors as a by-product of their attempt to express meaning in spontaneous speech with their limited competence in the TL system. Varadi (1973) initiated the empirical study of the phenomenon. Some other studies have followed (e.g., Tarone, 1977; Blum & Levenston, 1978; Palmberg, 1979; Bialystok & Fröhlich, 1980).

Because of the interactive nature of communication, the study of CS is twofold: productive and receptive strategies of communication. Tarone (1981, p. 288) referring to this "interactional function" (see footnote 5), defines a CS as "a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared". Tarone (1981) has further distinguished among CS, learning strategies, perception strategies and production strategies.

Learning strategy is an attempt to develop linguistic and sociolinguistic competence in the TL, i.e., to incorporate these into one's IL competence (e.g., memorization). Tarone, Frauenfelder and Selinker (1976, p. 100) claim that learning strategy is a "process of rule-formation ... a part of the general process of hypothesis formation and hypothesis testing in language learning". It seems, however, that the learner's adoption of CS may also involve hypothesis formation and hypothesis testing in the TL. For example, the use of a strategy such as "foreignizing L1" is based on the hypothesis that L1 and L2 are similar or identical. It remains to be shown how this hypothesis formation and hypothesis testing relate to the formation of rules.

Perception strategy is the attempt to interpret incoming utterances efficiently, with least effort (e.g., pay attention to stressed syllables or ends of words).

Production strategy is an attempt to use one's linguistic system efficiently and clearly, with minimum effort (e.g., prefabricated patterns). Tarone (1981) suggests that production strategies differ from CS in that production strategies lack the interactional focus on the negotiation of meaning. She does not, however, explain how the interaction necessary for CS will alter the nature of production strategies.

If we agree with Tarone's proposed definitions, then it would appear to be the case that most of the studies that have so far been reported under the title of CS, have, in fact, been the study of production strategies, in that the commonly used techniques such as story retelling and picture description do not necessarily elicit any interaction between the subject and the experimenter. So far, the focus has basically been on the way the learner communicates a concept without necessarily reaching agreement on meaning with an interlocutor. Therefore, the above definitions, while useful, still reflect some overlap. For example, the definition of production strategies can well be applied to CS, in that it is also usually the concern of the speakers to use their linguistic systems "efficiently and clearly, with a minimum of effort". It is not, therefore, quite clear what the unique feature(s) of production strategies is.

For purposes of clarity, it may be useful to formulate the definitions on the basis of the persons associated with the adoption of the strategies. Furthermore, it is possible to make some finer distinctions within the same categories.

Production strategies may be divided into two types:

- a) oral production strategies (OPS): alternative means (linguistic and non-linguistic) adopted by *speakers* in solving a communicative problem.
- b) written production strategies (WPS): all means (linguistic and non-linguistic) adopted by *writers* in solving a communicative problem.

OPS encompass the strategies aimed at solving the speaker's communicative problems. For example, OPS may be used if the speaker does not know, or cannot retrieve, the label for a concept. OPS may also include strategies that the speaker uses to solve the interlocutor's communicative problems. If the interlocutor does not understand or know the meaning of a word used by the speaker, the speaker may try to convey the concept to him/her by using a number of OPS. Similarly, if the interlocutor is a NS of the TL and the speaker is a non-native speaker, the latter may try to convey a cultural specific concept by using OPS. Or again, if both parties are NS of the TL, the speaker could try to convey to the latter, an acquired concept for which there is no L1 equivalent, by employing OPS. Note that in all the above cases it is the *speaker* who attempts to solve the existing communicative problem. It follows, then, that strategies used in the production of language registers such as "motherese" (see footnote 6) (e.g., Snow, 1972) and "foreigner talk" (see footnote 7) (e.g., Hatch et al., 1978) could be regarded as sub-categories of OPS.

WPS, however, are different. One may speculate that due to differences in the medium of communication, the pattern of strategy use will be somewhat different in the oral and the written forms of communication. For example, the production of "foreigner talk" in written form excludes those strategies related to the modifications in the speaker's intonation, stress pattern and speech tempo.

Reception strategies are concerned with the strategies adopted by the *listener* or the *reader* in an attempt to comprehend the meaning being conveyed by the speaker or the writer. One may predict differences in the types of reception strategies, in that communicative intent is signalled in different ways in each medium. Reception strategies are, therefore, of two types: aural reception strategies, used by listeners, and written reception strategies, used by readers.

While the listener's strategies are probably largely based on the suprasegmental phonemes, such as intonation, stress patterns and pitch, and paralinguistic features of speech, e.g., pause, facial expressions and gestures of the speaker, a reader has to rely on other sources, such as punctuation, to compensate for the lack of those sources of communicative intent in written language production.

Communication Strategies (CS) is a general term for the above which includes: production strategies (oral & written) and reception strategies (Aural & written).

As this study is concerned specifically with OPS, further use of the term CS, unless otherwise specified, will refer only to OPS of speakers.

Empirical Considerations

Types of CS

A number of CS have been identified to date in the literature as follows:

Transfer. The study of transfer, one of the most controversial strategies, can be dated back to the 19th century (Boaz, 1889: cited in Richards & Simpson, 1974, p. 3). Transfer, which may occur in phonological, morphological, syntactic, lexical, discursal and stylistic aspects of language, has been reported both as a learning and a communication strategy. Corder (1978b) suggests that transfer is a CS only when the learner simply borrows, for immediate purposes, items and features from his/her L1 or any other language without incorporating them into the IL system. The following L1-based strategies have appeared in the literature:

- a) *Language Switch* (Tarone, Cohen & Dumas, 1976; Tarone, 1977). The learner inserts a word or a phrase or a sentence from a language other than the TL with no attempt to adjust the insertion either phonologically or morphologically. This strategy has been referred to as an extreme case of borrowing by Corder (1978b).
- b) *Creating Cognates or Foreignizing L1* (Varadi, 1973; Bialystok & Fröhlich, 1980). The speaker creates non-existent words by applying L2 morphology and/or phonology to L1 lexical items, i.e., transforming L1 items according to L2 rules.

e.g., "obvieusement" for "obviously" (Bialystok & Fröhlich, 1980)

- c) *Literal Translation* (Tarone, 1977). The learner gives a literal translation of an item or phrase from L1 or any other language to create an item or a phrase in L2.

e.g., "place de feu" for "fireplace" (Bialystok & Fröhlich, 1980)

Avoidance. This strategy has been defined as "getting around target-language rules or forms which are not yet an established part of the learner's competence" (Tarone, Cohen & Dumas, 1976, p. 6). Strategies reported under avoidance are:

- a) *Topic Avoidance* (Tarone, Cohen & Dumas, 1976; Tarone, Frauenfelder & Selinker, 1976; Tarone, 1977). This is the strategy of not talking about topics linguistically problematic to the speaker.
- b) *Semantic Avoidance* (Tarone, Cohen & Dumas, 1976). The speaker talks about the "related concepts" which may presuppose the desired concept.

e.g., "it is hard to breathe" for "pollution"

- c) *Message Abandonment* (Tarone, Cohen & Dumas, 1976; Tarone, 1977, Corder, 1978b). The speaker initiates the communication but leaves it because he/she runs into difficulty.

e.g., "It has a ..."

- d) **Message Reduction** The speaker says less or less precisely what one intended to say (Corder, 1978b).

e.g., "look" for "gaze" (Blum & Levenston, 1978)

It seems that some aspects of "avoidance" do not qualify as CS in that by avoiding a communicative problem one has not, in fact, dealt with or attempted to solve the problem. For example, if a speaker encounters a problem such as non-availability of a lexical item or a syntactic structure, and adopts "message abandonment" he or she has, in fact, left the problem unsolved instead of using a CS to solve the problem. Furthermore, "message abandonment" may be due to a change in the speaker's speech plan which may not necessarily involve a communicative problem. If "message abandonment" is followed by a pause and/or a rising tone it may indicate the speaker's desire to be assisted by his or her interlocutor. In this case, "message abandonment" has been followed by "appeal". That is, the problem has not been dealt with by message abandonment but rather by appealing for assistance which, could also be a learning strategy or a CS.

Overgeneralization (Richards, 1971b). This strategy, which gives rise to intra-lingual errors, occurs when the learner disregards the restrictions on meaning and usage of the TL forms or rules.

e.g., "go = > goed" (morphological)
 "He is pretty" (lexical)

Superordinate Terms (Blum & Levenston, 1978). An IL speaker may use a superordinate or a "high-coverage" word (termed by Mackey & Savard, 1967) for a subordinate term because of the hyponymy relation between the two terms.

e.g., "tool" for "wrench"

Approximation (Bialystok, personal communication, 1979). This strategy has been defined as the use of a word or a phrase which resembles the desired L2 item, but contains a phonological and/or morphological error.

e.g., "horlog" for "horloge"
 /g/ /z/

Reference to "approximation" as a CS is also questionable. One is not really sure whether the produced forms merely indicate that the learner has incorrectly learned the item, or is trying to be as close as possible to his/her memory of how the word sounds. The latter case should usually be accompanied by a verification signal, in that the speaker is not confident about her/his production. Even so, one is not clear whether the speaker is verifying the correct pronunciation or the appropriateness of the lexical item (i.e., meaning).

Lexical Substitution or Semantic Contiguity (Tarone, Frauenfelder & Selinker, 1976; Bialystok & Fröhlich, 1980). This is the strategy of using a term which shares enough semantic elements in common with the intended concept but does not exactly communicate the desired concept. This strategy has also been referred to as "approximation" by Tarone, Cohen and Dumas, (1976) and Tarone (1977).

e.g., "chaise" (chair) for "tabouret" (stool) (Bialystok & Fröhlich, 1980)

Word Coinage (Varadi, 1973). The speaker creates a non-existent L2 lexical item in order to communicate the desired concept.

e.g., "airball" for "balloon"

Paraphrase (Tarone, 1977; Blum & Levenston, 1978). The speaker rewords the message in an alternate acceptable TL construction.

Circumlocution (Varadi, 1973; Tarone, 1977). This is an attempt to describe the characteristics of elements of the object or action instead of giving the term itself.

e.g., "a piece of land surrounded by water" for "island"

Prefabricated Patterns (Hakuta, 1975). A "regular patterned segment of speech" used "without knowledge of its underlying structure, but with the knowledge as to which particular situations call for what patterns" (cited in Tarone, Cohen & Dumas, 1976, p. 80). Tarone (1981) refers to prefabricated patterns as a production strategy.

e.g., "do you" pattern in "What do you doing?" for "What are you doing?"

Over-elaboration (Tarone, Cohen & Dumas, 1976). In this strategy, the speaker produces utterances which are grammatically correct, but which sound very formal or "elegant". Tarone, Cohen and Dumas (1976) suggest that this could be due to training transfer in the learning situation, i.e., emphasis on the written language that would likely lead to using utterances which are restricted to writing.

Epenthesis (Tarone, Cohen & Dumas, 1976). A vowel is inserted into a consonant cluster that is hard for the learner to pronounce. For example, a Persian learner of English may produce /estar/ for /star/, because there are no consonant clusters in initial position in Persian.

Over-elaboration and epenthesis may also be regarded as production strategies in Tarone's (1981) definition. None of the above three strategies (prefabricated patterns, over-elaboration and epenthesis), however, fit into the definition of OPS proposed in this study. It seems that none of these strategies are primarily adopted to compensate for the lack of some knowledge or solving a communication problem in the communication situation (see footnote 8).

Lexicalization of Grammatical Items. A lexical item rather than a grammatical modality is used to express meanings, sometimes even extending the meaning load carried by a grammatical item, and thereby in a way lexicalizing it. For example, to express the subjunctive in Spanish, one may use the word *si* (which carries uncertainty of condition) at the beginning of the sentence followed by an indicative rather than a subjunctive structure (Ryan, 1976; see also Harley & Swain, 1977).

Appeal to Authority (Tarone, Frauenfelder & Selinker, 1976; Tarone, 1977). This strategy can have the following forms:

- a) appealing for direct assistance from someone else to supply the desired term or form (Tarone, 1977)
- b) referring to a dictionary (Tarone, 1977)
- c) picking up clues from the interlocutor's language (Corder, 1978c)

d) seeking verification (Bialystok, personal communication, 1979)

i) utterance accompanied by rising intonation

e.g., "It is a kind of tool called wrench? "

ii) utterance preceded or followed by a direct question

e.g., "Is it correct? " or "Can one say ...? "

It seems that there is no solid ground to consider "appeal" as a CS, in that one is going beyond observing the speaker's communicative behavior and is making assumptions about the speaker's communicative activities. That is, one is not really certain whether a speaker's "direct appeal" (Tarone, 1977) is for learning or immediate communicative purposes. Furthermore, "verification" (Bialystok, personal communication, 1979) follows a speech production not to solve a communicative problem but to check if one's interlocutor has understood, or agrees with one's linguistic output (in the case of learners), or with the nature of given information (in the case of all speakers).

Mime (Tarone, 1977). Mime refers to non-verbal strategies of communication. The use of this strategy is indicated when the learner, by gesture or sound representation or acting out an action tries to communicate the intended meaning.

Factors Affecting the Choice of CS

A number of factors have been proposed in the literature as affecting the speaker's choice of CS: the learner's personality (Tarone, 1977; Corder, 1978b, c), the nature of the interaction, age, social background, attitude towards the culture related to the language and knowledge of the topic of conversation (Corder, 1978c). To my knowledge, no empirical research has been carried out to test the influence of the above factors on the choice of CS. However, some other factors have been extracted from empirical studies on the issue. These factors are: form of language instruction (Piranian, 1979; reported by Tarone, 1981), the speaker's perception of the listener (Aono & Hillis, 1979; reported by Tarone, 1981), task and target item in the experimental situation (Bialystok & Fröhlich, 1980). In addition, it may be that the learner's native language background and its distance from the TL (see also Kellerman, 1978), knowledge of the target culture, the context of communication and the relationship between the interlocutors, in some way or another, affect the speaker's choice of CS.

In relation to the factor of communication situation, Tarone (1981, p. 287) makes a distinction between CS and sociolinguistic competence. She suggests that while CS are ways of compensating for some lack in the linguistic system of the TL "without necessarily considering situational appropriateness", sociolinguistic competence "focuses on the appropriate usage of stylistic variants of this rule system based on a shared knowledge of social norms". It seems, however, that the reason for the adoption of CS may also be associated with problems in retrieving (Faerch & Kasper, 1980), with negotiation of meaning with the interlocutor due to the existence of some semantic ambiguity (Tarone, 1981) or may be with conveying an acquired concept for which there is no L1 equivalent to an interlocutor with the same L1 background-usually the case with those who have been exposed to more than one language or culture. It is further suggested that the speaker's use of CS is to some extent subject to situational constraints (see footnote 9). For instance, in talking to their teachers in a classroom setting, learners may adopt more "risk-taking strategies" (see footnote 10) because they may feel less inhibited about making

mistakes. But, in talking to someone with a great social distance in a formal setting (e.g., an interview session), speakers may be concerned about not making mistakes and more inclined to avoid using structures or items that they do not feel confident about. In other words, they may either avoid the problem altogether, or deal with it in a more conservative manner (e.g., use "circumlocution" instead of "foreignizing L1").

It has also been suggested that the speakers' choice of CS and their levels of TL proficiency may be related (Tarone, 1977; Corder, 1978c). There is, however, only slight indication of this relationship in the literature. Bachman and Palmer (1981) claim that learners have different strategic abilities. Bialystok and Fröhlich (1980) have reported some interactions between learners' levels of TL knowledge and their strategy use in terms of, for example, their sensitivity to the variety of CS. The relation between the speakers' patterns of CS use and the speakers' TL proficiency levels need to be more clearly defined. Examining this relationship may shed some light on the contribution of different kinds of knowledge to the speakers' communicative performance and on the nature of language proficiency.

This study, while controlling for a number of the above factors (see Method) will explore the nature of such a relationship.

CHAPTER 4

THE STUDY

The main problem addressed by this study is the nature of the relationship between speakers' proficiency level in the TL and their communicative strategy use. The research is directed specifically at two key assumptions about this relationship. The first is that learners' use of CS will change with the development of their TL proficiency level. That is, CS have a transitional nature as a function of the speaker's TL proficiency level. The second implication arising from this premise is that the developmental direction of the learner's strategy use will be towards that of the NS of the TL.

Hypotheses

There are, then, two hypotheses central to this study:

- H1. Speakers' TL proficiency level affect their selection of CS types.
- H2. Speakers' TL proficiency level affect the relative frequency of use of their various CS.

These hypotheses are based on the assumption that the low level of proficiency in the TL may preclude or reduce the adoption of certain CS which place heavy linguistic or cultural demands on the speaker. Furthermore, IL speakers may devise CS which might not be employed by NS. This could result from the existence of an L1 source at their disposal.

The pattern of strategy use by more proficient learners can be expected to be closer to that of NS, in terms of both the CS types and relative frequency of their use, than that of less proficient learners. This argument is consistent with the transitional nature of IL. The IL hypothesis claims that the learner's IL usually moves progressively towards the TL system. The adoption of correct grammatical items is not likely to be the only manifestation of this progressive move. In the present theoretical framework, learners' CS should also reflect this transition. The suggestion is, therefore, that eliciting the learners' CS is a way of tapping their "transitional competence".

The two hypotheses will be tested through the comparison of the performance of two distinct proficiency levels of Persian ESL students and that of a group of NS of English.

Given that the subject groups have been established on the basis of their TL proficiency level, it is probable that they will not be equally successful in communicating their intended meanings. More proficient speakers can be expected to have a greater ability in handling the items than the less proficient speakers. In addition, it is likely that these different groups will also differ in effective use of CS, irrespective of the type of CS they use. In effect, it could be predicted that because of their inadequate TL knowledge, less proficient learners will have to rely on a greater number of CS before they can convey their intended meanings, while more proficient learners would be expected to communicate their messages through fewer CS. Therefore, two further hypotheses are germane to this study:

- H3. Speakers differ in terms of their success at conveying their intended meanings, as a function of their proficiency level in the TL.

- H4. Speakers differ in terms of the number of CS they use in conveying their meanings irrespective of the type of CS they use, as a function of their proficiency level in the TL.

Method

Subjects

There were three groups of 20 subjects each:

Group 1 (G1) = Low proficiency level of Persian ESL students

Group 2 (G2) = High proficiency level of Persian ESL students

Group 3 (G3) = NS of English (comparison group).

Each group contained both females and males and there was an average age of 25 for the whole sample (see footnote 11). The two proficiency levels of Persian ESL students were selected from the language schools, colleges and universities of Toronto and Montreal.

The grammatical proficiency level of the students was measured by the "Michigan Test of English Language Proficiency", which was administered to 120 students who had been selected through a preliminary process designed to screen out language learners of average ability. The test was administered to small groups of students in different sessions. On the bases of the range of scores obtained in the test, two distinct proficiency levels were chosen for the study.

The oral proficiency levels of the chosen groups were then determined by "The IEA (International Educational Achievement) Test of Proficiency in English as a Foreign Language." The mean scores and standard deviations are presented in Appendix A. A t test on both the grammatical and oral proficiency scores of the two learner groups indicated that the two groups were significantly different ($p < .001$) (see Appendix A).

The third group consisted of NS of English who were students at the University of Toronto.

Task Design

Before describing the communicative task designed for this study, it is useful to review briefly the major techniques which have been used in previous studies related to the oral production of IL speakers, and to note some of their weaknesses.

Tarone (1977) gave pictures to students and asked them to describe them. However, the experimental conditions lacked the interactional aspects of normal communication. Levenston and Blum (1978) used a discourse completion task which is more appropriate for the study of lexical acquisition than it is for eliciting CS. Hamayan and Tucker (1979) used a story-retelling technique. In this case the data may have been biased by the memory span of the subjects. In addition, the technique permits avoidance. Dittmar and Rieck (1979) studied spontaneous translation into L2 of a story heard in L1. This suffers both flaws of the story-retelling technique compounded by the fact that it cannot be used for eliciting CS in L1. Bialystok & Fröhlich (1980) used a picture reconstruction task. However, this task was influenced by the subjective judgement of the interlocutor.

The communicative task designed for this study was a concept-identification task which involved oral production and interaction between the subjects and their interlocutors. The design of the task was such that it could be used both for different levels of learners and for NS of the TL.

The task focussed on the communication of single lexical items. This approach was selected because the lexicon plays a crucial role in communication. Furthermore, the lexicon, being the most arbitrary aspect of language, is subject to continuous development both in the language as a whole and in its individual speakers. While an individual may

master the syntactic rules of a language (either in L1 or L2) at some point, he/she usually continues to learn more vocabulary throughout life. This property of the lexicon made it possible, therefore, to find items for which even NS were not likely to know the labels.

Choice of Items

The task involved communication of both concrete and abstract concepts. Although almost all previous studies on CS have concentrated on the communication of concrete items, abstract concepts were included in this study in order to obtain a global picture of the communication of nouns. Furthermore, abstract nouns (AN), lacking visual clues, were expected to place a heavier linguistic burden on the speakers than concrete nouns (CN). Therefore, AN had the potential to indicate more clearly the disparity in communicative ability among the subject groups. AN were also expected to reveal certain differences between the two cultural groups' concepts of some items.

Two criteria were considered in the choice of CN. First, the concepts had to be known by the subjects; otherwise, unfamiliar concepts might blocked attempts at communication. For example, "bellows" would be a culturally inappropriate item for Persian subjects, since fireplaces are not common in Iran. Similarly, items specific to Persian culture may not be identifiable by English speakers. This problem is, of course, minimized in closely related cultures, and is reduced in the case of speakers who have lived in the TL context for a while.

A second consideration in the choice of CN was that they had to be sufficiently difficult for the subjects and would, therefore, constitute a genuine communicative problem which is the motivation for the use of CS. Consequently, different sets of concrete items had to be chosen for the learner groups and NS.

Item Sets

Three sets comprising ten items each were developed: two sets of CN (CN1 and CN2) and one set of AN.

CN1 Set. This set, which was used with the learner groups, was prepared by selecting items from a number of illustrated books, magazines and dictionaries. The most valuable sources for these items proved to be the illustrated entries in dictionaries (*Webster's Seventh New Dictionary* and *The Advanced Learner's Dictionary of Current English*).

An initial list of 45 target items was chosen. Pictures of these were presented to sixteen advanced learners of English in Tehran, Iran. The ten items whose lexical representations were consistently unknown to the students were chosen for the experimental set. These items were:

1. Abacus
2. Hammock
3. Lantern
4. Scarecrow
5. Seesaw
6. Funnel
7. Thimble
8. Pomegranate
9. Dust-pan
10. Palanquin

CN2 Set. This set, which was used with the comparison group of NS, was prepared by selecting those items which are highly infrequent in daily language use, but are conceptually familiar to English speakers. An initial list of 23 items was presented to seven NS of English

at the Ontario Institute for Studies in Education. As with CN1, the ten most difficult items were selected for the final study. These items were:

1. Parianquin
2. Turret
3. Aqueduct
4. Ruff
5. Pillory
6. Yoke
7. Decanter
8. Trolley
9. Cherub
10. Cruet-stand

AN Set. This set, used with all three subject groups, was chosen by preparing a preliminary list of 18 AN. These were presented to a number of Persians and NS of English at the Ontario Institute for Studies in Education. Those items such as "intelligence", which appeared to be conceptually difficult for the subjects to describe (even in their L1), were eliminated. This left a list of ten relatively common items which were not semantically ambiguous to the subjects:

1. Fate
2. Martyrdom
3. Flattery
4. Success
5. Honesty
6. Pride
7. Courage
8. Faithfulness
9. Justice
10. Patience

Procedures

The different nature of the noun types (CN and AN) necessitated slightly different procedures.

During all the experimental sessions, the experimenter, in addition to providing instructions concerning the tasks, took notes of any meaningful gestures the subjects used in order to communicate different target items.

CN Procedure

For CN, the subjects were provided with pictures of the target items, in order to provide a uniform basis for description, and to avoid any ambiguities that might arise because some items had double meaning (e.g., "Trolley"). Furthermore, the items were pictured in isolation from any context, on separate cards. This approach eliminated avoidance and the subject's attention was focussed on the item of interest.

All subjects received the pictures of the concrete items in the same order. Faced with items for which they did not know the exact name, they were asked to try to convey the concepts to their interlocutors. Interaction between the subjects and their interlocutors continued until the interlocutors could identify the target items.

For the purpose of comparison, the subjects of G3 were asked to do the task with both sets of concrete items (CN1 and CN2). In the first case, since the items were relatively easy for the subjects, they were asked to try to communicate the items without using the names.

The interlocutors were instructed to let the experimenter know immediately if they recognized a given concept but they did not know the exact word for it. In these cases, the interlocutors were then asked to draw the target item, or to identify its picture among the pictures of other items within the same semantic domain, or to re-describe the target item in their own words. Whatever the case, if the interlocutor and the subject agreed on the received meaning, the concept was regarded as identified.

AN Procedure

The abstract nouns were written, on single cards, in the subjects' mother tongues. This was done in order to make sure that the learners knew what the target concepts were if they did not happen to know the exact words for them in English.

All subjects received the same set of AN and in the same order. They were asked to try to convey each concept to their interlocutors without using the exact target words. The interaction continued until the interlocutor could identify the concept.

Interlocutors

In an attempt to make the communicative task as close as possible to a real communication situation each subject had a different interlocutor, who was, in all cases, a NS of English. This was done in order to avoid a subjective judgment by a common interlocutor as to the amount of information he or she would have to assume sufficient for the identification of a target item. Furthermore, the task also allowed a natural interaction between the subjects and their interlocutors, which is an important aspect of communication.

Summary

In sum, learner groups received two sets of items: CN1 Set and AN Set. NS received all three sets for the purpose of different comparisons: CN1 Set, CN2 Set and AN Set.

CHAPTER 5

QUALITATIVE ANALYSIS OF THE DATA

There were some qualitative and quantitative differences among the groups in the use of CS. The results are, therefore, presented in two parts: The first includes a description of the taxonomy of CS developed from the data; the second presents, in terms of the major hypotheses, the summary of the results from the quantitative analysis based on the developed taxonomy in Chapter 6.

Taxonomy of CS

A number of points were taken into consideration in relation to the identification of the subjects' CS.

First, the typology of the strategies was based on the type of information included in the CS. Second, the subject's point of view was the basis for the identification of his or her CS. That is, bearing in mind that CS are only vehicle through which speakers use their different kinds of knowledge to solve their communicative problems, the only concern at this stage of the analysis was to identify these tools regardless of the truth or informative value of their content. For example, in "It's a synonym for wait" (patience), the subject's strategy is "Synonymy" regardless of whether or not "wait" is really a synonym for "patience".

A third consideration in the identification of the subjects' CS was that very often a subject's statement contained several CS. That is, they occurred within the framework of another CS. Each of these embedded strategies has been regarded as a separate entry. For example: "You could either fail or _____?" (Success) includes two CS: Contrast and Linguistic Context. In the examples provided in the description of the taxonomy, the target CS in each example will be underlined, if necessary.

On the basis of the data collected in this study, certain major modifications were made in the existing taxonomies. That is, due to the nature of this study, in terms of the variety of item types (CN and AN) and variety of subject groups (learner groups at two different developmental stages of their IL and a group of NS of the TL), a number of new CS were elicited. The classification of the strategies was, therefore, based on the list of CS obtained from the data of this study. The strategies were then grouped into major categories and subcategories on the basis of their commonalities. Finally, four major communicative approaches were identified on the basis of the type of knowledge used for their adoption. It is revealed that speakers do not rely only on their specific linguistic knowledge, but also exploit their other knowledge sources such as their contextual knowledge, world knowledge and paralinguistic or non-linguistic knowledge (i.e., mime) in order to solve their communicative problems.

The four major approaches (see footnote 12) are as follows:

- I. Linguistic Approach
- II. Contextual Approach
- III. Conceptual Approach
- IV. Mime

All four approaches were adopted by all three subject groups and in communicating both item types (i.e., CN and AN). However, a number of constituent strategies of these approaches were specific to concrete or abstract nouns. The description of each category or a single CS will, then, be accompanied by an indication of the related item type(s), i.e., (CN), (AN) or (CN + AN).

L Linguistic Approach (CN + AN)

The linguistic approach exploits the semantic features of the target item. This approach reflects the speaker's formal analysis of meaning in the sense understood by linguists working in the structural tradition (see footnote 13).

This approach includes: Semantic Contiguity, Circumlocution and Metalinguistic Clues.

A. Semantic Contiguity (CN + AN). Semantic Contiguity has been defined as using a term which shares some semantic elements with the target concept but does not exactly communicate the desired meaning (Bialystok & Fröhlich, 1980; see also Tarone, Frauenfelder & Selinker, 1976).

In the categorization used in this study, however, Semantic Contiguity is used as a general term to cover a number of CS which all exploit items semantically related to the target item. The constituent CS of Semantic Contiguity are as follows:

1. Superordinate (CN + AN). The use of this strategy is indicated by the use of a "superordinate word" for a subordinate term because of the hyponymy relation between the two terms (Blum & Levenston, 1978). Examples:

- "It's a one kind of bed" (see footnote 14) (Hammock)
- "This is a receptacle" (Decanter)
- "This is a quality" (Honesty)
- "This is a feeling" (Pride)

2. Comparison (CN + AN). This is the strategy of exploiting the similarities between the two terms. This strategy had the following realizations:

a). Positive Comparison (CN + AN). The target concept is compared in positive terms with another concept.

i) Analogy (CN + AN). The target item is compared with another item. Examples:

- "something like balance" (Seesaw)
- "Is same like lamp" (Lantern)
- "It's like the victory" (Success)
- "It's something like self-esteem" (Pride)

It should be pointed out that some comparisons were also made in relation to the size, shape, material (in CN) and the constituent and metalinguistic features (in CN and AN) of the target items. Examples:

- "It might be the size of a grapefruit" (size) (Pomegranate)
- "It's almost like a little house" (shape) (Palanquin)
- L: "Is it faith?"
- S: "It's a longer word" (metalinguistic clues) (Faithfulness)

TABLE 1
Summary of the Taxonomy

- I. Linguistic Approach**
 - A. Semantic Contiguity**
 1. Superordinate
 2. Comparison
 - a) Positive Comparison
 - i) Analogy
 - ii) Synonymy
 - b) Negative Comparison
 - i) Contrast and Opposition
 - ii) Antonymy
 - B. Circumlocution**
 1. Physical Description
 - a) Size
 - b) Shape
 - c) Colour
 - d) Material
 2. Constituent Features
 - a) Features
 - b) Elaborated Features
 3. Locational Property
 4. Historical Property
 5. Other Features
 6. Functional Description
 - C. Metalinguistic Clues**
- II. Contextual Approach**
 - A. Linguistic Context**
 - B. Use of TL Idioms and Proverbs**
 - C. Transliteration of L1 Idioms and Proverbs**
 - D. Idiomatic Transfer**
- III. Conceptual Approach**
 - A. Demonstration**
 - B. Exemplification**
 - C. Metonymy**
- IV. Mime**
 - A. Replacing Verbal Output**
 - B. Accompanying Verbal Output**

ii) **Synonymy (CN + AN).** The speaker intends to give an item which most resembles the target item. Examples:

- "tea-cart" (Trolley)
- "caravan" (Palanquin)
- "synonym for wait" (Patience)
- "It's loyalty" (Faithfulness)

b) **Negative Comparison (CN + AN).** The target item is compared with another item in negative terms.

i) **Contrast and Opposition (CN + AN).** The target item is contrasted with another item. Examples:

- "It's not a same as computer" (Abacus)
- "It's not like a calculator" (Abacus)
- "When you don't have it you, you're scared" (Courage)
- "It's not just death or, you know, natural death, it's for a cause" (Martyrdom)

ii) **Antonymy (AN).** This is the strategy of providing an antonym for the target item. Examples:

- "It's the opposite of adultery" (Faithfulness)
- "Opposite it's is exactly hurry" (Patience)
- "This is the opposite of failure" (Success)

B. Circumlocution (CN + AN). Circumlocution is an attempt to describe the characteristics or elements of the concept (Tarone, 1977). The subcategories of circumlocution and their constituent CS are as follows:

1. **Physical Description (CN).** The physical characteristics of the item are provided:

a) **Size.** The size of the item is given. Examples:

- "It's small" (Pomegranate)
- "It would fit into your hand" (Pomegranate)

b) **Shape.** The speaker comments on the shape of the item. Examples:

- "This fruit have a shape like earth" (Pomegranate) (two strategies: Analogy and Shape)
- "It's frilly" (Ruff)
- "It's usually rounded" (Turret)

c) **Colour.** The colour of the target item is given. Example:

- "Its colour is red" (Pomegranate)

d) **Material.** The speaker indicates what material the item is made of. Example:

- "It's made of metal" (Thimble)

2. **Constituent Features (CN + AN).** In CN, constituent features refer to different parts of the object, and in AN, they are the underlying semantic elements of the concept.

a) *Features* (CN + AN). The feature(s) of the target concept are given with no elaboration. Examples:

- "has *bars* and *beads* on it" (Abacus)
- "There is a *handle* on it" (Lantern)
- "Someone who *dies* for a *cause*" (Martyrdom)

b) *Elaborated Features* (CN + AN). The details of a single feature of the item is given. Examples:

- "has always *little juicy seeds inside* and they're *red*, and they're really *tart*" (Pomegranate).
(It should be noted that all the indicated characteristics relate only to "seed".)
- "It has a peel but we can't, we can't eat peel of it" (Pomegranate)
- "being killed in, usually in — for a *good cause*" (Martyrdom)

3. *Locational Property* (CN). This is the strategy of commenting on the location of the item in terms of its geographical area (i.e., country of origin) and/or its immediate location, e.g., "farm" (for "scarecrow") or "the tip of finger" (for "thimble"). Examples:

- "It was used maybe in Arab countries" (Palanquin)
- "Tie wit! two, *two trees*, we tie to two tree" (Hammock)
- "They used to use — wear *around their neck*" (Ruff)

4. *Historical Property* (CN). The speaker comments on the time or period when the item was used or made. Examples:

- "They used to use — wear around their neck in, *in the time of Henry VIII*, I think" (Ruff)
- "It belong to many many years ago" (Abacus)
- "Ancient people used this" (Palanquin)

5. *Other Features* (CN + AN). Other features refer to those feature which are not necessarily factual but are rather indirectly associated with the target item. While some of these associations may be shared by speakers of different linguistic backgrounds (the first example given below), many of these specific associations appear to be context and/or cultural bound (second to fifth examples below). These social- or cultural-specific associations with the concepts may not prove to be of any informative value to an interlocutor unfamiliar with the target social or cultural elements. Examples:

- "It's workmate to a broom" (Dust-pan)
- "It's the passion fruit" (Pomegranate)
- "It's very expensive" (Decanter)
- "The greatest of the seven deadly sins" (Pride)
- "It's honourable" (Martyrdom)

6. *Functional Description* (CN). This is the strategy of providing information concerning the function of the item, i.e., indicating what it does or what it is used for. Examples:

- "When you finish sweep — ah — you use — you used for — *collect garbage*" (Dust-pan)
- "This have a paste for use — cooking" (Pomegranate)
- "It's a bridge that *carries water*" (Aqueduct)

C. Metalinguistic Clues (CN + AN). The speaker gives metalinguistic information on the target item. Examples:

- "It's actually a noun with the suffix" (Martyrdom)
- "It's a very common word" (Success)
- "It comes from the word judicial, it's the same thing. It's, it's a root of the word" (Justice)

II. Contextual Approach (CN + AN)

This approach exploits the contextual knowledge of the speaker. That is, it provides contextual information about the target item rather than giving its semantic features.

The constituent strategies of this approach are as follows:

A. Linguistic Context (CN + AN). This is the strategy of providing a linguistic context for the target item. That is, giving a sentence or a phrase where the item can fit and leaving the target item blank. Examples:

- "When you sweep the floor, you gather up the dust with ____" (Dust-pan)
- "You could fail or ____" (Success) (two strategies: Linguistic context and Contrast)
- "If the wife fools around with somebody else, she is not *this* to the husband" (Faithfulness)

B. Use of TL Idioms and Proverbs (AN). This strategy exploits one's knowledge of target idioms or proverbs in order to refer the interlocutor to a specific and popular context where the target item is used. Examples:

- "It comes before a fall" (Pride)
- "It gets you nowhere" (Flattery)
- "The key to ____" (Success) (two strategies: Linguistic Context and TL Idioms)
- "We're trying to *butter them up*" (Flattery)

C. Transliteration of L1 Idioms and Proverbs (CN + AN). The speaker attempts to translate an L1 idiom or proverb into the TL. Examples:

- "Some say, it's written on your forehead" (Fate)
- "Some people think that the sky is open and somebody comes in the world" (Pride)
- "When somebody is so good — *the heart is so clean*" (Honesty) (In Farsi, a clean-hearted person refers to an honest person.)

D. Idiomatic Transfer (CN + AN). This strategy involves reference to some semantic or syntactic feature of an L1 idiom, as opposed to its actual translation, assuming that it will work the same way in the TL. Examples:

- "I take an examination and I fail, O.K.? and one of my adjectives has been broken" ("to break one's Pride")
- "You say, O.K. 'good luck'. What's another word for 'good luck'?" (Success) (The subject has considered Persian "be successful" as a synonym for its corresponding expression in English, "good luck".)
- "What is the bottom of the ice-cream" (Funnel) (The subject has considered the Persian "funnel-shaped ice-cream" for English "ice-cream cone".)

III. Conceptual Approach (CN + AN)

The Conceptual Approach exploits the speaker's knowledge of the world and particular situations. This knowledge may be biased or influenced by the speaker's social and/or cultural background.

The constituent CS of this approach are as follows:

A. Demonstration (CN + AN). This is the strategy of creating a concrete context that reflects the target concept. Examples:

- "It's supposed to be one boat lost his way, its way, you see; and he, it wants to know its way and the — some people, somebody, at the boat, and you see another ship, another ship, and he want to — he wants to know which one is his way and the worker in another ship — use with this kind of thing" (Lantern)
- "Suggest that you are a teacher and I am a student; and I didn't take the — for — pass and I fail; and I come and say something, for example, you teach very well, you are a good man and — what's the name of my action?" (Flattery)

B. Exemplification (CN + AN). This is the strategy of reference to examples, such as certain people, places, occasions or real events, that correspond to the target concept. Examples:

- "Shakespeare wears them around his neck" (Ruff)
- "You may use it in camping" (Lantern)
- "A soldier in a war definitely needs it" (Courage)
- "The servants especially do, for example, to their masters" (Flattery)

C. Metonymy (AN). The concept is represented through a prototype member of that concept which may or may not be shared by different cultures and speech communities. Examples:

- "It's symbolized by a *dog*" (Faithfulness)
- "peacock" (Pride)
- "Joan of Arc" (Martyrdom)
- "We say *God* has ____" (Justice) (two strategies: Linguistic Context and Metonymy)

IV. Mime (CN + AN)

This non-verbal strategy refers to the use of meaningful gestures in communicating the target item. Mime has the following subcategories:

A. Replacing Verbal Output (CN + AN). This non-linguistic strategy is used by the speaker to substitute a linguistic output. Examples:

- "It's this size" (Pomegranate)
- "It looks like this" (Turret)
- "The thing that they use for ..." (the subject points to the tip of his finger) (Thimble)
- "You always think are higher than me and you look me like this" (Mime for a snobbish look) (Pride)
- "You just sit on your chair in this way (Mime for restlessness) because you haven't ____" (Patience) (two strategies: Linguistic Context and Mime)

B. Accompanying Verbal Output (CN). In adopting this para-linguistic strategy, the speaker uses a meaningful gesture to accompany his or her verbal output. Examples:

- "It goes up and down" (mime for the movement) (Seesaw)**
- "It has a handle" (mime for holding the handle) (Lantern)**
- "This fruit have a shape like earth" (mime for a round shape) (Pomegranate)**

Other Strategies

Apart from the CS listed above, another strategy was also confronted in the analysis of the data in this study, i.e., spelling. This CS usually followed a creation of phonetic ambiguity (comparable to "approximation" (Bialystok, personal Communication, 1979)). "Spelling" indicates that the speaker is not sure of his or her pronunciation of an item and tries, therefore, to solve this problem by spelling that target item for the interlocutor. This CS was not, however, coded and is not included in the above taxonomy because it did not occur in relation to the target items of the study.

CHAPTER 6

QUANTITATIVE ANALYSIS OF THE DATA

The quantitative analysis of the data primarily addressed the four major hypotheses of the study. The first two hypotheses were concerned with the types and the relative frequency of the use of CS by the subject groups. The third hypothesis was related to the success of the subjects in conveying their intended meanings; and the fourth hypothesis was associated with the subjects' effective use of CS. The results will, therefore, be presented accordingly.

- Section I : Choice of CS
- Section II : Success
- Section III: Effective use of CS

SECTION I

Choice of CS

Hypothesis 1 (H1)

The results of the analysis related to H1 revealed that subject groups, despite the differences in their TL proficiency levels, were essentially similar in the adoption of the two major communicative categories (i.e., Semantic Contiguity and Circumlocution) and the four major approaches (i.e., Linguistic Approach, Contextual Approach, Conceptual Approach and Mime). That is, all subject groups exploited the same knowledge sources for the adoption of CS. It is also noteworthy that both CN and AN, despite the difference in their nature, elicited the same communicative approaches. This set of common CS, then, could be referred to as Common Core Strategies.

The subject groups differed, however, in the use of a few constituent strategies related to the Contextual Approach. These are discussed below.

1. Use of TL Idioms and Proverbs

This strategy was used only by G3 and G2. Clearly, this is a very sophisticated strategy in that its language is idiomatic and it is also highly demanding in terms of the cultural knowledge of the speaker. While G1 seems to be unable to meet the requirements of this strategy, G2 has apparently acquired enough linguistic and cultural knowledge to solve the problem.

2. Transliteration of L1 Idioms and Proverbs

This L1-based strategy was used by both learner groups (i.e., G1 and G2). However, subjects were mostly aware of the markedness of the idioms and proverbs, and their statements were usually accompanied by "in Persian we say". The use of this L1-based strategy may not, therefore, be as much a function of the speakers' limited knowledge of L2, as it may be the availability of an alternative linguistic and cultural source at their disposal. Thus, it may be for this reason that G2 still uses this CS despite the fact that the input of the strategy is from a source other than the TL.

3. *Idiomatic Transfer*

This strategy was used only by G1. The adoption of this strategy may be an indication of the learners' limited knowledge of, and exposure to, the target language and culture. It should be pointed out, however, that this was the only transfer-based strategy elicited in this study. This strategy does not exist in the list of CS used by G2, suggesting that learners abandon transfer-based strategies as they approach the TL. These results are consistent with those reported by Taylor (1975). He maintained that elementary students used the learning strategy of "transfer" significantly more frequently than did the intermediate students.

The presence of Idiomatic Transfer and the absence of TL Idioms and Proverbs in the strategy list of G1 seem to suggest that for communicating in the TL, idiomatic and cultural aspects of L1 are among the last to be abandoned, while similar aspects of the TL are among the last to be acquired.

Furthermore, Idiomatic Transfer and Transliteration of L1 Idioms and Proverbs were the only L1-based strategies adopted by the learner groups in this study. None of the L1-based strategies previously reported in the literature such as "foreignizing L1" (Bialystok & Frohlich, 1980) and "creating L2 cognates" (Varadi, 1973) were elicited in this study. In consideration of these data, one may suggest that learners' perceptions of the distance between their L1 and the TL affect their choice of CS. That is, learners' awareness of the large distance between L1 and L2 may reduce their tendency to depend on L1-based CS simply because they assume that they will not work. This is consistent with Kellerman's (1977, 1978) position that the learner's tendency to transfer will be biased by his or her awareness of typological relatedness between L1 and L2. Transfer will be discouraged if L1 and L2 are distant (cf. also Sijöhölm, 1976). Put in Adjemian's (1976) terms, the relative "permeability" of learners' interlanguages from their L1s may be influenced by how related they think their L1 is to the TL. However, more data from similar studies are needed to verify this conclusion.

In general, the profile of the CS used by the subject groups seems to suggest that learners, having access to an alternative linguistic and cultural source (L1), used a relatively wider variety of types of CS than did NS. One may speculate that the second language(s) of NS of the TL may affect their strategy use, as well. This was not, however, observed in the data of this study.

Only two of the CS recorded in this study can, therefore, be regarded as proficiency-dependent strategies: Idiomatic Transfer (used only by G1), and TL Idioms and Proverbs (used by G2 and G3). The rest of the strategies, which were used by all groups, can be referred to as proficiency-independent strategies.

In sum, although the differences among groups in terms of the type of CS they adopted are minimal, the results do not reject the predictions of H1.

Concerning the direction in the selection of the type of CS, G2 was more similar to G3 than was G1. G2 adopted all NS' strategies plus Transliteration of L1 Idioms and Proverbs; G1 adopted two L1-based CS (i.e., Idiomatic Transfer and Transliteration of L1 Idioms and Proverbs) and did not use TL Idioms and Proverbs at all.

Hypothesis 2 (H2)

The most distinct differences among groups in their relative frequency of use of CS occurred in relation to the Common Core Strategies. These results provide reliable and adequate predictions for the performance of the groups. The results are consistent in separate data (CN and AN) and the merged data (CN + AN), and in the analysis of the different comparisons.

The summary tables of the analysis of variance on the groups' use of the four major approaches (Tables 2 and 3) indicate that the Contextual Approach was the only one whose use did not differ among groups. (See Appendix B, Tables 1-4 for more details.)

G2 and G3 appeared to be significantly different from G1 in their relative frequency of use of the Linguistic Approach. On the other hand, G1 used the Conceptual Approach proportionally more often than did the other two groups. Finally, G1 and G2 deviated significantly from G3 in their proportion of use of Mime.

Of all approaches, the linguistic Approach, with its constituent CS such as Synonymy, Antonymy and Superordinate, most specifically and heavily draws on the speaker's linguistic knowledge. G2 and G3, with a richer linguistic knowledge of the TL at their disposal, were, therefore, in a better position to rely on this approach. G1, because of its lower level of linguistic knowledge of the TL, was relatively disadvantaged in attempting this approach. G1 seemed to compensate for this by drawing more on their world knowledge; consequently, they adopted the Conceptual Approach proportionally more than the other two groups.

Regarding the Contextual Approach, the results cannot easily be interpreted. All the differences among groups, in terms of the *type* of CS they used, were clustered in this approach. However, the differences among groups in the *proportional* use of this approach were nonsignificant, probably because it was the approach least frequently adopted by all groups. Because of the lower incidence of occurrence of the constituent CS of this approach (see Appendix C), the analysis of variance on the mean scores should be interpreted cautiously.

TABLE 2

Summary for Between Group Differences
in the Use of the Four Major Approaches
in the Separate Data

CS	CN1 Set	CN2 Set	AN Set
Linguistic Approach	G3, G2>G1	G3, G2>G1	G2, G3>G1
Contextual Approach	n.s.	n.s.	n.s.
Conceptual Approach	G1>G2	G1>G3, G2	G1>G2, G3
Mime	G1, G2>G3	G1, G2>G3	n.s.

TABLE 3

Summary for Between Group Differences
in the Use of the Four Major Approaches
in the Merged Data

CS	CN1 + AN	CN2 + AN
Linguistic Approach	G3, G2>G1	G3, G2>G1
Contextual Approach	n.s.	n.s.
Conceptual Approach	G1>G2, G3	G1>G2, G3
Mime	G1, G2>G3	G1, G2>G3

It is also understandable that the learner groups used a higher proportion of Mime than did the NS. Mime, being an aid to the linguistic output in the communication situation, is probably more in demand by learners than NS. However, there was no significant difference between the two learner groups in their use of Mime. One might suppose that other factors, such as cultural differences between the learners and the NS, were operative. That is, people of certain cultures may use more Mime than those of other cultures. However, similar data from learners of different cultural backgrounds would be needed to substantiate such a claim.

These results indicate that although speakers with different TL proficiency levels draw upon similar knowledge sources to solve their communicative problems, they use different proportions of these sources to do so. These results also suggest that in solving communicative problems at the earlier stages of L2 learning, learners draw more often on their other knowledge sources such as world and paralinguistic knowledge in order to compensate for the limitations of their more specific TL knowledge than they do at more advanced stages of their L2 learning. H2 is, therefore, at least partially, supported by the data.

It appears that, in general, speakers' use of CS and their level of TL proficiency are related.

SECTION II

Success

Analysis of the speakers' rate of success in communicating their meanings indicated that, while all three groups were equally successful in communication of concrete concepts, they differed in the success of their communication of abstract concepts (see Table 4). Further analysis on the data revealed that AN were more challenging because they demanded more linguistic and cultural knowledge from the speakers. It was evident from the data that grammatical accuracy, knowledge of discoursal rules and the development of a meaningful context were often more crucial to communication of AN than to that of CN (see Paribakht, 1982 for more detailed discussion.) Another factor that appeared to affect the speakers' successful communication was their knowledge of the appropriate connotations of the concepts in the TL. It seems that the conceptual frameworks of speakers, which are established in their L1 learning, are transferred in their L2 learning. That is, learners, at least at the initial stages of their L2 learning, only learn the labels for previously acquired concepts with specific associations and connotations. "Conceptual Transfer" is, therefore, a subtle transfer from L1, which may create some problems in L2 communication. It seems, therefore, that "Contrastive Conceptual Analysis" would be an interesting area for L2 learning research.

Another factor affecting the communication of the concepts, particularly AN, was "lexical split". It was apparent, in the case of a few items, that English and Farsi equivalent concepts did not exactly share the same components of meaning. For example, interlocutors claimed that while the word "fate" has negative and religious connotations for them, the word "destiny" is more neutral. These distinctions do not, however, exist for Farsi speakers and the word /saermevešt/ is usually perceived as meaning everything predestined for human beings, including all the positive and negative happenings in the course of one's life. The word "Patience" in Farsi, is a derivative from the verb "to wait". Thus many subjects of G1, tried to arrive at "Patience" by giving clues to the verb "to wait", thinking that the same relationship exists in English. With non-target items, numerous cases of lexical split confused the intended meanings of the speakers. For example, the same word is used in Farsi for "to define" and "to compliment", so a number of G1 subjects used "to define a person" for "to

compliment a person" in conveying "flattery". It seems, therefore, that "Contrastive Lexical Analysis" is another important L2 learning research area where, to date, not much work has been done.

TABLE 4
Summary for Between Group Differences in Success

	CN1 Set	CN2 Set	AN Set
Success	n.s.	n.s.	G3>G2>G1

Thus, the differences among the groups' ability to deal with the items, although not noticeable in context-embedded communicative situations (i.e., CN), were detected in context-reduced communicative situations (i.e., AN). These results suggest, therefore, that the type of item (message) is a factor affecting the success of communication. A number of other factors contributing to communicative breakdown, e.g., the role of interlocutor and the nature of interaction between the interlocutors, were investigated and are discussed in Paribakht, 1982.

H3 is, therefore, partially confirmed by these results.

SECTION III

Effective Use of CS

Efficiency was operationally defined as the speed with which subjects could communicate their intended meanings (i.e., the average number of CS used per item).

Two measures of efficiency were performed on the data. In the first measurement, the ratio of success to the total number of CS used, and in the second measurement, an average number of CS used per item, irrespective of success, were calculated. Thus, in the first measurement, a higher score and in the second one, a smaller score would indicate more effective use of CS.

Both measures of effective use of CS produced similar results in CN comparisons: the results for CN1 comparison were the reverse of those for CN2 comparison (Table 5). In CN1 comparison, G3 was significantly more efficient in the use of CS than G1; in CN2 comparison, G1 and G2 were superior to G3.

The reason for these results, given the operation of the same elements in both comparisons, is probably item effect. An analysis of the communication of CN1 and CN2 sets by NS (see Paribakht, 1982), clearly indicated that NS used a greater number of CS in conveying the items of CN2 set than they did in conveying those of CN1 set. The reason for these differences is probably that, as indicated before, CN2 items were more difficult than CN1 items. CN2 items were chosen from rare items so that NS (G3) would not know CN2 items' names. Thus, since CN2 items were remote from daily life, the subjects had to give more specific clues about them than about CN1 items before the items could be identified by the interlocutors. Therefore, communicating the items of the CN2 set, elicited more trials from G3 than did the items of CN1 set. Thus, it appears that while item type (CN or AN) affects both qualitative and quantitative patterns of CS use, different items of the same type (CN1 & CN2), whether difficult or easy for the speakers, affect only the quantitative aspect of speakers' strategy use. The results from CN2 comparison are not, therefore, meaningful in relation to H4, in that this hypothesis is directly involved with the number of

CS used for the communication of the target items. Thus, it is legitimate to consider only the results from CN1 comparison where all groups received the same set of items. Given these results, there was no significant difference between the learner groups. The difference between the two groups is, however, revealed in AN comparison. The results from the second analysis for AN reveals that although the mean score of trials for G2 was less than that for G1, only the difference between G1 and G3 achieved statistical significance. In the first analysis, however, the distinction in the groups' effective use of CS in communicating the target items is clearer ($G3 > G2 > G1$).

TABLE 5
Summary for Between Group Differences
in the Effective Use of CS

Measurement	CN1 Set	CN2 Set	AN Set
Success / CS	$G3 > G2, G1$	$G2, G1 > G3$	$G3 > G2 > G1$
CS / I	$G2, G1 > G3$	$G3 > G2, G1$	$G1 > G3$

Once again as in the analysis of "success", CN1 set did not clearly detect the differences in effective use of CS among the subject groups, while AN did. That is, although in both CN and AN comparisons, G3 was superior in efficiency to the learner groups, disparity between the learner groups was only revealed in the AN comparison. This may again be due to the heavier linguistic and cultural demands of AN. In conclusion, H4 is generally confirmed by the above findings.

Factors contributing to communicative delay were investigated. Apart from the proficiency level of the speakers, the type of item (CN & AN) and by extension the type of message or the topic of conversation, a number of other factors appear to influence the subjects' effective use of CS. It should be pointed out that the reasons for communicative delay and communicative breakdown were not always clear cut, independent or consistent. A single factor that had caused communicative breakdown in one interaction might only result in communicative delay in another, depending on the other factors involved. In effect, any communicative failure or delay is the outcome of a cumulative effect. In general, it was noted, however, that while only serious knowledge (i.e., linguistic) deficiencies could result in communicative breakdown, the reasons for communicative delay could range from minor knowledge inadequacies to more serious inadequacies in the communication process. Some of these causes, which were identified as major contributors to either communicative breakdown or delay, are:

1. Since CS constitute a vehicle through which speakers may communicate their intended meanings, the type of CS is one of the factors contributing to effective communication of the speakers' intended meanings. For example, Synonymy or Antonymy were usually far more effective strategies than Superordinate or Analogy.

2. What determines the effective use of CS is not only the strategy itself but also a number of factors associated with it. The same CS may have different surface realizations in terms of the well-formedness of the utterance and the use of certain structures and lexical items.

An analysis of the surface realization of a single strategy (i.e., Synonymy) by different subject groups revealed that the use of the strategy was handled quite differently. While the utterances of NS were error-free, both learner groups committed grammatical errors in the use of the strategy. Less proficient speakers (G1) committed more errors, both in terms of

type and frequency, than did more proficient speakers (G2). Similarly, an analysis of the role of grammatically in interaction indicated that those grammatical errors of G1 which entered, and interfered with, the communicative exchange showed greater variety and frequency than those of G2 (see Paribakht, 1982 for details.) Thus, the differences among groups, in terms of both their success in conveying their intended meanings and their effective use of CS, may have been affected by the degree of grammatical accuracy of the utterances encompassing their strategies.

3. Although grammatical accuracy may have a role in communicative success or effective use of CS, as Varadi (1973) also suggests, production of grammatically correct sentences does not necessarily mean that the speaker has been able to communicate his or her intended meaning. Another factor contributing to either the speaker's success or effective use of CS may be informative value of the strategy.

An analysis of the informative value of the subjects' synonymys as judged by the appropriateness of their synonyms, demonstrated significant differences among the subject groups (see Paribakht, 1982 for details.) While the informative value of the strategy of Synonymy could be judged by the appropriateness of the subjects' synonyms, the informative value of the other CS could probably be determined by the quality of the knowledge (e.g., world knowledge) utilized in them. For example, in communicating the concept of "martyrdom" through Metonymy, representing the concept through a national figure, not known to the interlocutor's speech community is of no informative value. Whereas, the indication of a hero known to the interlocutor may immediately trigger the target concept.

More specific use of vocabulary may also affect the informative value of the speaker's strategies. Compare the following examples:

It is a thing.

It is a kind of light. (Lantern)

Both of the above are examples of the Superordinate strategy. However, while the first provides the interlocutor with a very vague piece of information, the second indicates at least a partial function of the object, and is consequently by far more informative.

An analysis of the number of immediate successes after the use of the strategy of Synonymy revealed that more proficient speakers, having fewer inappropriate synonyms and making fewer grammatical errors, had a greater number of immediate successes than did the less proficient speakers (see Paribakht, 1982.)

One may assume, therefore, that the success, and effective use, of CS is partially determined by the informative value of the speaker's CS.

4. Flexibility on the part of more proficient speakers, demonstrated in the analyses of both item treatment and patterns of repetition (see Paribakht, 1982 for details), may be another factor contributing to success, or effective use, of strategies.

The analysis of item treatment by subject groups revealed that although all three groups used a higher proportion of Circumlocution for CN than for AN, the proportion was greater for G3 than it was for the learner groups. Furthermore, the Conceptual Approach was used proportionally more often for AN than for CN by all three groups, but this proportion was higher for G3 and G2 than it was for G1. Consequently, more proficient speakers treated the item types (CN and AN) with more differentiation, and exhibited more sensitivity to the item needs, than did the less proficient speakers.

The analysis of 'repetition' also demonstrated that while less proficient speakers had greater mean percentage use of 'exact repetition', more proficient speakers resorted relatively more often to 'repetition of old information in new forms'. Clearly, the latter type of repetition, requiring flexibility in the use of linguistic forms (i.e., alternative syntactic structures and lexical items), is indicative of high language proficiency. The linguistic

sophistication required for this type of repetition may be the very reason that less proficient speakers gave up far more frequently than did more proficient speakers. That is, more proficient speakers, being able to try out different ways of conveying the same message, were less willing to give up than were the less proficient speaker who had a limited choice of ways of expressing their meanings.

Linguistic flexibility, (capability in using alternative forms for conveying the same information) and flexibility needed for the communication of item types (related to the adoption of CS) are both manifestations of the same phenomenon: flexibility. Flexibility is, therefore, likely to be an aspect of language proficiency, which appear to be influential in speakers' successful communication of intended meanings and effective use of CS.

Apart from the factors suggested above and documented by the analysis of the data of the study, a number of other factors were observed to influence, in one way or another, success and speed of communication.

- 1) Compatibility of the interlocutors with subjects in terms of:
 - a) Personality (e.g., perseverance in the communication of the message)
 - b) Shared knowledge of the world (e.g., the languages known, educational and/or professional backgrounds)
 - c) Being a "visually oriented person" or an "abstract thinker"
- 2) The speaker's fluency seemed to facilitate the interlocutor's identification of the target concept by reducing the number of broken sentences, repetitions and pauses (see footnote 15), and thereby speeding up the communication process.
- 3) Giving the key features in describing the item was important: e.g., "handle" for "Lantern" (also reported by Bialystok & Frohlich, 1980).
- 4) Providing a proper sequence of clues for items was another factor. A description which led from the more general to the particular was more appreciated by the interlocutor than one which led from the particular to the general.

Speaker's effective use of strategies and their level of TL proficiency appear to be related. One may, therefore, conclude that effective use of CS is an aspect of language proficiency.

CHAPTER 7

CONCLUSIONS AND IMPLICATIONS

The results of the study show that in the majority of the comparative analyses, both in terms of types and relative frequency of use of CS, the advanced learners are in the mid-position between the NS and the low-proficiency learners. This suggests a directionality of transition in the learners' use of CS toward that of the NS, which in turn reflects the transitional nature of their ILs. The data suggest that learners' use of CS has specific characteristics at different developmental stages of their IL. That is, learners abandon or adopt CS, and also alter their proportional use of certain strategies as they approach the TL. Learner behavior in terms of strategy use seems, therefore, to be transitional and dynamic.

It also appeared in this study that the differences among the subject groups with respect to the types of CS they used was minimal. Presumably, NS and advanced learners, who have developed adequate levels of linguistic and cultural knowledge in the TL, may not encounter communicative problems as frequently as low-proficiency learners and may not, therefore, use CS as often. However, when a problem arises, NS and learners seem to appeal to basically the same tools and means for solution. In short, CS is not a unique IL property.

One may conclude from these findings that all speakers (NS and learners) have certain means available to them when encountering communicative problems. It seems that as Blum and Levenston (1978) suggest, awareness of semantic relations such as synonymy, hyponymy and antonymy, together with an ability to use circumlocution, provide a basis for speakers' adoption of CS for solving communicative problems. For example, in communicating the concept "success", the speaker may use the strategy of Antonymy and refer to "failure". In this example, the speaker is aware of the underlying semantic relation between the two concepts. That is, the speaker knows that both concepts include, first, undertaking a task and second, completing it, and differ only as a function of the outcome. That is, if the outcome is positive it implies success, while if it is negative it results in failure.

In that all subject groups adopted basically the same types of CS, it would appear that all adult speakers share a certain ability or "competency" referred to as "strategic competence". This is consistent with the position put forward by Canale and Swain (1980), in which they refer to strategic competence as one of the component competencies of communicative competence.

Speakers' strategic competence and their proficiency level in the TL appear to be independent. An increase in the speakers' level of TL proficiency will make it possible for them to adopt certain strategies that require that knowledge, or will allow them to rely more often on it in adopting CS. Note, however, that this additional TL knowledge simply provides the learners with the type of knowledge they would need to utilize in a given strategy; it does not affect their underlying strategic competence. For example, the low proficiency group, who did not adopt TL Idioms and Proverbs, used the strategy of Transliteration of L1 Idioms and Proverbs. In effect, these two CS are basically the same, except that they have interacted with two different sources of competencies. In the former strategy L2, and in the latter strategy L1 and L2, competencies are at work.

However, the development of the speakers' TL knowledge (e.g., linguistic) affects the surface realization of their CS. That is, although speakers may share strategic competence, they may differ greatly in implementing that competence, simply because their strategies interact with their different levels of knowledge sources.

Learners, particularly at the earlier stages of their IL development, possess limited TL knowledge — linguistic and otherwise. IL speakers' strategies interact, therefore, with their limited TL knowledge, resulting in their production of deviant IL forms. Furthermore, such limitation of TL knowledge may not only encourage IL speakers to resort to their other applicable knowledge sources more than NS do, but it may also lead them to make use of their other linguistic and cultural sources (e.g., L1) for the implementation of their compensatory strategies. This may result in the appearance of some other deviant forms in the speaker's IL production. The degree of interaction of the learners' CS with their L1 competencies may, as suggested before, depend on certain psychological factors, such as their perceptions of distance between L1 and L2. The existence of certain deviant forms in the IL speakers' TL performance does not, therefore, seem to be the outcome of undeveloped strategic competence, but rather is due to inadequate TL knowledge. Furthermore, because of the frequency with which IL speakers need to use CS, the availability of L1, and their limited L2 knowledge, they may also devise strategies which may not exist in L1. For example, strategies such as "creating L2 cognates" or "foreignizing L1" (Tarone, 1977; Bialystok & Fröhlich, 1980) are the outcomes of complex interactions between the strategies and the two sources of competencies (L1 and L2). For instance, the use of "obvieusement" for "obviously" (= "foreignizing L1") is the outcome of interaction between the learner's L1 lexical knowledge and L2 syntactic and phonological knowledge.

Thus, learners' limited (or lacking) TL knowledge may not merely preclude (in terms of type) or reduce (in terms of frequency) the adoption of certain CS which require that knowledge, but may also affect the surface realization of their strategies in terms of, for example, grammatical accuracy and informative value. These differences, among others, cumulatively affect speakers' success and effective use of CS in the conveyance of their meanings. The analysis of the surface realizations of the strategy of Synonymy by different groups revealed that although all three adopted the strategy, there were significant differences among them, in terms of grammatical accuracy of the utterances encompassing the strategy and also the informative value of the strategy. This analysis not only supports the notion that strategic competence and linguistic competence are two different dimensions of language competence, it also indicates that, although speakers may share strategic competence, they may well exhibit idiosyncratic patterns in the realization of this competence.

Strategic competence seems to develop in the speaker's L1 with the individual's increasing language experience, and to be freely transferable to L2 learning situations. This competence appears, however, to have a different status than the other language competencies (i.e., linguistic and sociolinguistic) proposed by Canale & Swain (1980) and others: first, it is transferable to L2 learning and communication situations without causing interference; second, its implementation depends upon the availability of other competencies (e.g., linguistic and cultural) in the TL and other knowledge areas such as contextual, world and paralinguistic.

It is further suggested that the notion of strategic competence should be broadened to include all language-related strategies: learning strategies used to *expand* the speaker's competence, and CS used to *exploit* it. Strategic competence could then be defined as the learner's ability to try out different means for solving any language-related problems whether in learning or in communication. Communicative strategic competence, a component of strategic competence, includes both production strategies (oral and written) used to solve lexical, syntactic and sociolinguistic problems in communicating a message, and reception strategies (aural and written) used to solve similar problems in receiving the message.

Implications for L2 Pedagogy

The results of this study suggest criteria for materials design, sequencing and presentation in the ESL classroom.

It was suggested earlier that oral production strategies, a component of the speaker's strategic competence, represent an ability whose application in the TL becomes possible only if the TL knowledge — linguistic and otherwise — becomes available to the learner. In this study it was possible to identify the semantic, as well as the typical syntactic patterns, required for CS implementation (see Paribakht, 1982 for more detailed discussion.) The linguistic manifestations of CS which were identified can provide a basis for developing L2 teaching materials with the aim of preparing L2 learners for successful negotiation of problematic communicative situations. An appropriate sequence for the presentation of such material can be based on the frequency with which the different groups of speakers in this study applied them. This approach could be referred to as the "strategic approach" to L2 teaching, which integrates both structural and communicative goals and has the following specific features:

1. It takes advantage of the learner's existing abilities in the L1 learning situation.
2. The unit of description is a CS.
3. There is no pre-determination of items to be learned according to the teacher's definition of learner's needs. Rather, the items are derived from those expressed by the learner in solving his/her communicative problems.
4. This approach is not an end in itself but rather is complementary to a communicative approach to L2 teaching.

The proposed approach (see footnote 16) certainly needs further work and testing. Further research on other components of the learner's strategic competence (e.g., written production strategies, reception strategies — aural and written) and in relation to language aspects other than lexical (e.g., syntactic or sociolinguistic), could provide an extensive inventory of strategies as a basis for the development of a comprehensive strategic approach dealing with all four language skills. The analysis of the content of such an inventory of strategies could provide a basis for the design of survival-aimed TL input material for the language classroom.

Suggestions for Further Research

It was suggested earlier that an individual's strategic competence develops in L1 as language experience increases. It would be interesting to find out what the developmental stages of this competence are.

A number of the CS used by adult subjects in this study reflects a certain level of cognitive development. Children learning an L1 have developing cognitive structures, limited language knowledge (for example, in semantic differentiation and conceptual boundaries), and little other knowledge (e.g., contextual, world and paralinguistic). They are unlikely to have the same level of strategic competence as adults. It may, therefore, be fruitful to explore cognitive principles underlying the use of CS and to see how the speaker's level of cognitive development affects his/her pattern of CS use. Such an investigation may not only shed light on the development of strategic competence in the L1, but may also provide insight into the relationship between cognition and strategy use. Further, such study may provide additional evidence on the hypothesis that L1 acquisition and L2 learning entail different processes because L1 acquisition involves not only the acquisition of language-related knowledge but also the development of language-related abilities.

It was suggested that strategic competence should include all language-related strategies — learning strategies and CS (oral and written production strategies, and aural and written

reception strategies) — in relation to all aspects of language, (e.g., lexical, syntactic and sociolinguistic). A consequent issue is the nature of each of these strategic dimensions. There is obviously much potential for further research on strategic competence and its constituents. It is becoming increasingly evident that language learning and language use not only involve language-related knowledge, but also language-related abilities (see footnote 17). Further research on such abilities, as demonstrated in the use of language-related strategies, will further illuminate the construct of language competence.

FOOTNOTES

¹ Canale and Swain's (1980) model of communicative competence includes: grammatical competence (knowledge of the grammatical rules of the language), sociolinguistic competence (knowledge of sociocultural rules of use and rules of discourse) and strategic competence (verbal and non-verbal CS).

² The adoption of this notion in this study does not necessarily imply the acceptance of all attendant definitions and implications put forward by Selinker (1972).

³ See also Faerch and Kasper (1980) for a critique.

⁴ "The criterion of problem-orientedness implies that the learner is having a problem in reaching a particular learning or communicative goal. The criterion of consciousness implies that the learner is consciously aware of her having a problem. Hence, consciousness refers to the problem, and not to the plan which the learner adopts in order to cope with her problem." (Faerch & Kasper, 1980, p. 104)

⁵ Tarone (1979b, p. 4) proposes the following criteria for characterizing a CS:

- i) a speaker desires to communicate a meaning X to a listener;
- ii) the speaker believes the linguistic or sociolinguistic structure desired to communicate meaning X is unavailable, or not shared with the listener;
- iii) the speaker chooses to:
 - a) avoid — not attempt to communicate meaning X; or,
 - b) attempt alternative means to communicate meaning X; the speaker stops trying alternatives when it seems clear to the speaker that there is shared meaning.

⁶ "Motherese" is a simplified, altered and adjusted form of adult speech including such features as variations in rate of speech, short and simple sentences, avoidance of embedding subordinate clauses, and modified intonation.

⁷ "Foreigner talk" is a simplified language register used by NS, for the purpose of giving extra clarity to their utterances, in addressing non-native speakers. "Foreigner talk" includes features such as repetition, slower tempo and higher volume.

⁸ See also Faerch and Kasper (1980).

⁹ This suggestion is consistent with Faerch and Kasper's (1980) position that communicative plan is sensitive to the speaker's assessment of the communicative situation.

¹⁰ "Risk-taking strategies", e.g., "language switch" and "foreignizing L1", are those more prone to failure, i.e., misunderstanding or communication breakdown (Corder, 1978c).

¹¹ A number of factors, discussed in Chapter 3, may affect the speaker's choice and effective use of CS. These factors were taken into consideration as much as possible in selecting the subjects and designing the communicative task:

- a) knowledge of the topic of conversation- the target items were all conceptually familiar to the subjects.
- b) communicative situation and task- these were similar for all subjects.
- c) age- all subjects were in their twenties. The average age was 25.
- d) knowledge of the target culture- all subjects were living in the TL context and presumably had some exposure to the target culture.

Sex did seem to be a factor. However, for the record, G1 had 3 women and 17 men; G2 had 3 women and 17 men; G3 had 11 women and 9 men.

¹² Some of the labels for the approaches have been proposed after considering several alternatives. These labels may best, if not perfectly, reflect the major sources of knowledge. That is, although all approaches are essentially ways of conveying meaning, each approach carries the meaning through different means, i.e. pure linguistic, contextual, conceptual and paralinguistic.

- ¹³ The structural linguists Katz and Fodor (1963), dealing with "distinctive feature theory" believe that the meaning of a lexeme can be dissected into minimal basic criterial attributes that will differentiate the lexeme under consideration from other lexemes.

For example, *cow*

Noun, -male	}	markers
+adult		
+bovine		
has a tail	}	distinguishers
has two horns		
gives milk		

- ¹⁴ All cited examples of the elicited strategies are exact transcripts.
- ¹⁵ Pauses often occurred before words difficult to pronounce or predicted to be inappropriate, and before difficult structures.
- ¹⁶ The first and the second features of the strategic approach are consistent with Breen and Candlin's (1980) position in communicative language teaching. They suggest that "the purposes of communicative curriculum will incorporate that which the learner already knows and can do as a communicator from the start" (p. 94). They further believe that we should consider "how the learner defines his own language learning needs in curriculum design" (p. 94).
- ¹⁷ See also Breen and Candlin (1980) for their discussion on the communicative abilities of negotiation, expression and interpretation, as essential elements of any target competence.

REFERENCES

- Adjemian, C. On the nature of Interlanguage systems. *Language Learning*, Dec. 1976, 26(2), 297-320.
- Bachman, L.F., & Palmer, A.S. The construct validation of the FSI oral interview. *Language Learning*, June 1981, 31(1), 67-86.
- Bailey, C.-J.N. Variation and linguistic theory. Washington: Centre for Applied Linguistics, 1973.
- Bialystok, E. A theoretical model of second language learning. *Language Learning*, 1978, 28(1), 69-83.
- Bialystok, E., & Fröhlich, M. Oral communication strategies for lexical difficulties. *Interlanguage Studies Bulletin*, 1980, 5(1), 3-30.
- Bialystok, E. A psycholinguistic framework for exploring the basis of second language proficiency. Paper presented at the BAAL Seminar, "Interpretative Strategies in Language Learning", Lancaster, England, 1981.
- Blum, S., & Levenston, E. Universals for lexical simplification. *Language Learning*, Dec. 1978, 28(2), 399-415.
- Breen, M.P., & Candlin, C.N. The essentials of a communicative curriculum in language teaching. *Applied Linguistics*, 1980, 1(2), 89-112.
- Canale, M., & Swain, M. Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1980, 1(1), 1-47.
- Carroll, J.B. The contributions of psychological theory and educational research to the teaching of foreign languages. In A. Valdman (Ed.), *Trends in language teaching*. New York: McGraw-Hill, 1966.
- Chomsky, N. Linguistic theory. In R.G. Mead, Jr. (Ed.), *Language teaching: broader contexts*. New York: Northwest Conference on the Teaching of Foreign Languages, 1966.
- Corder, S.P. The significance of learner's errors. *IRAL*, Nov. 1967, 5(4), 161-170.
- Idiosyncratic dialects and error analysis. *IRAL*, Feb. 1971, 9(1), 147-160.
- Error analysis, interlanguage and second language acquisition. In V. Kim. Ila (Ed.), *Language teaching and linguistic surveys*. Cambridge: Cambridge University Press, 1978a.
- Strategies of Communication. In M. Leiwo, & A. Räsänen (Eds.), *AFinLAN Vuosikirja. Publications de l'Association Finlandaise de Linguistique Appliquée*, 1978b, 23, 17-21.
- Language learner language. In J.C. Richards (Ed.), *Understanding second and foreign language learning: issues and approaches*, Rowley, Mass.: Newbury House, 1978c.
- Dickerson, W.B. The psycholinguistic unity of language learning and language change. *Language Learning*, 1976, 26(2), 215-231.
- Dittmar, N., & Rieck, B.O. An exploratory study of the verbal organization of L2 tense making in an elicited translation task by Spanish immigrants in Germany. Berlin: Freie Universität, manuscript, 1979.
- Dulay, H.C., & Burt, M.K. A new perspective on the creative construction process in child second language acquisition. *Language Learning*, Dec. 1974, 24(2), 253-278.
- Duškova, L. On the sources of errors in Foreign Languages. *IRAL*, Feb. 1969, 7(1), 11-36.
- Faerch, C., & Kasper, G. Processes and strategies in foreign language learning and communication. *Interlanguage Studies Bulletin*, 1980, 5(1), 47-118.

- Hakuta, H. Learning to speak a second language: what exactly does the child learn? In D.P. Dato (Ed.), *Developmental psycholinguistics: theory and applications*. Georgetown Round Table on Languages and Linguistics, Georgetown University, 1975.
- Hamayan, E.V., & Tucker, G.R. Strategies of avoidance used by native and non-native speakers of French. *Working Papers on Bilingualism*, 1979, 17, 84-96.
- Harley, B., & Swain, M. An analysis of verb form and function in the speech of French immersion pupils. *Working Papers on Bilingualism*, 1977, 14, 31-46.
- Hatch, E., Shapira, R., & Cough, J. "Foreigner talk" discourse. *ITL Review of Applied Linguistics*, 1978, 39-60.
- Jordens, P. Rules, grammatical intuition and strategies in foreign language learning. *Interlanguage Studies Bulletin*, 1977, 2(2), 5-76.
- Katz, J.J., & Fodor, J.A. The structure of a semantic theory. *Language*, 1963, 39(2), 170-210.
- Kellerman, E. Towards a characterization of the strategy of transfer in second language learning. *Interlanguage Studies Bulletin*, 1977, 2(1), 58-145.
- Giving learners a break: native language intuition as a source of predictions about transferability. *Working Papers on Bilingualism*, 1978, 15, 59-89.
- Lado, R. *Linguistics across cultures*. Ann Arbor: University of Michigan, 1957.
- Mackey, W.F., & Savard, J.G. The indices of coverage. *International Review of Applied Linguistics in Language Teaching*, 1967, 71-121.
- Naiman, N., Fröhlich, M., & Todesco, A. The good language learner. *T.E.S.L. Talk*, Jan. 1975, 6(1), 58-76.
- Nemser, W. Approximative systems of foreign language learners. *IRAL*, Feb. 1971, 9(1), 115-123.
- Nickel, G. Problems of learners' difficulties in foreign language acquisition. *IRAL*, Aug. 1971, 9(3), 219-227.
- Palmberg, R. Investigating communication strategies. In R. Palmberg (Ed.), *Perceptions and production of English: papers on interlanguage*. AFTIL (publications of the Dept. of English Abo Akademi, Abo), 6, 1979.
- Paribakht, T. The relationship between the use of communication strategies and aspects of target language proficiency: A study of Persian ESL students. Ph.D. thesis, University of Toronto, 1982.
- Richards, J.C. A non-contrastive approach to error analysis. *English Language Teaching*, 1971a, 25(3), 204-219.
- Error analysis on second language strategies. *Language Sciences*, 1971b, 17, 12-22.
- Error analysis and second language strategies. In J.W. Oller, Jr., & J.C. Richards (Eds.), *Focus on the learner: pragmatic perspectives for the language teacher*. Rowley, Mass.: Newbury House, 1973.
- Richards, J.C., & Sampson, G.P. The study of learner English. In J.C. Richards (Ed.), *Error analysis: perspectives on second language acquisition*. London: Longman, 1974.
- Rubin, J. What the "good language learner" can teach us. *TESOL Quarterly*, 1975, 9(1), 41-51.
- Ryan, A. Interlanguage from the inside: the speaker's side of the story. Manuscript, Edinburg University, 1976.
- Schachter, J. An error in error analysis. *Language Learning*, Dec. 1974, 24(2), 205-214.
- Selinker, L. Interlanguage. *IRAL*, Aug. 1972, 10(3), 209-231.
- Sijöhölm, K. Do Finns and Swedish-speaking Finns use different strategies in the learning of English as a foreign language? In R. Palmberg (Ed.), *Perceptions and productions of English: papers on interlanguage*. AFTIL (Publications of the Dept. of English Abo Akademi, Abo), 6, 1979.

- Snow, C. Mother's speech to children learning language. *Child Development*, 1972, 43, 549-565.
- Tarone, E., Cohen, A.D., & Dumas, G. A Closer look at some interlanguage terminology: A framework for communication strategies. *Working Papers on Bilingualism*, 1976, 9, 76-90.
- Tarone, E., Frauenfelder, U., & Selinker, L. Systematicity/variability and stability/instability in interlanguage systems. In H.D. Brown (Ed.), *Papers in second language acquisition (Language Learning, Special Issue, No. 4)*, 1976.
- Tarone, E. Conscious communication strategies in interlanguage: a progress report. In D. Brown, C. Yorio & R.H. Crymes (Eds.), *On TESOL '77*. Washington D.C.: TESOL, 1977.
- Some thoughts on the notion of "communication strategy". *TESOL Quarterly*, Sept. 1981, 15(3), 285-295.
- Taylor, B.P. The use of over-generalization and transfer learning strategies by elementary and intermediate students of ESL. *Language Learning*, June 1975, 25(1), 73-107.
- Varadi, T. Strategies of target language learner communication message-adjustment. Paper presented at the 6th Conference of the Romanian-English Contrastive Project in Timisoara, May 28-29, 1973.

APPENDIX A
Mean Scores and Standard Deviations
of Grammatical and Oral Proficiency Scores
of the Two Learner Groups

Groups	Michigan Test of English Language Proficiency (written)		IEA Test of Proficiency in English (oral)	
	M	SD	M	SD
G1 N = 20	54.45	4.40	31.03	7.84
G2 N = 20	92.45	3.44	68.32	12.11

APPENDIX B

TABLE 1

Summary for Between Group Differences
in the Use of Linguistic Approach

CS	CN1 Set	CN2 Set	AN Set
Semantic Contiguity	n.s.	G3>G1	G3, G2>G1
Circumlocution	G3>G2, G1	n.s.	n.s.
Metalinguistic Clues	n.s.	n.s.	n.s.
Linguistic Approach	G3, G2>G1	G3, G2>G1	G2, G3>G1

TABLE 2

Summary for Between Group Differences
for the Use of Contextual Approach

CS	CN1 Set	CN2 Set	AN Set
Linguistic Context	n.s.	n.s.	n.s.
TL Idioms and Proverbs	-	-	G3>G2, G1
Transliteration of L1	-	-	G1>G2, G3
Idiomatic Transfer	n.s.	-	G1>G2, G3
Contextual Approach	n.s.	n.s.	n.s.

TABLE 3
Summary for Between Group Differences
for the Use of Conceptual Approach

CS	CN1 Set	CN2 Set	AN Set
Demonstration	n.s.	G1>G2, G3	G1>G2, G3
Exemplification	n.s.	n.s.	n.s.
Metonymy	n.s.	n.s.	n.s.
Conceptual Approach	G1>G2	G1>G3, G2	G1>G2, G3

TABLE 4
Summary for Between Group Differences
for the Use of Mime

CS	CN1 Set	CN2 Set	AN Set
Replacing Verbal Output	G1>G3	n.s.	n.s.
Accompanying Verbal Output	G1, G2>G3	G1, G2>G3	-
Mime	G1, G2>G3	G1, G2>G3	n.s.

APPENDIX C

Frequency distribution of the Use of Each Major Communicative Approach by Each Group and for Each Item Set

Approaches	G1 (N = 20)		G2 (N = 20)		G3 (N = 20)		
	CN1 (n* = 197)	AN (n = 200)	CN1 (n = 144)	AN (n = 200)	CN1 (n = 200)	CN2 (n = 153)	AN (n = 200)
Linguistic Approach 821		843	627	843	749	881	671
Contextual Approach 6		205	1	153	7	1	144
Conceptual Approach 47		327	17	192	26	21	137
Mime 74		3	49	1	13	21	0
Total	948	1378	694	1189	795	924	952

*n = number of items tried

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